

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-30 (cancelled)

Claim 31 (currently amended): An isolated polynucleotide comprising:

- (a) a nucleotide sequence encoding a polypeptide having [[a]] lysyl-tRNA synthetase activity, wherein the polypeptide has an amino acid sequence of the synthetase and the amino acid sequence of SEQ ID NO:10 share at least of at least 90% sequence identity, based on the Clustal alignment method, when compared to SEQ ID NO:10; or
- (b) a full-length complement of the nucleotide sequence of (a).

Claims 32-33 (cancelled)

Claim 34 (currently amended): The polynucleotide of claim 31, wherein the polypeptide has an amino acid sequence of the synthetase and the amino acid sequence of SEQ ID NO:10 share at least 95% sequence identity, based on the Clustal alignment method, when compared to SEQ ID NO:10.

Claim 35 (currently amended): The polynucleotide of claim 31, wherein the nucleotide sequence comprises comprising the nucleotide sequence of SEQ ID NO:9.

Claim 36 (currently amended): The polynucleotide of claim 31, wherein the synthetase comprises the amino acid sequence of the polypeptide comprises SEQ ID NO:10.

Claim 37 (previously presented): A chimeric gene comprising a polynucleotide of claim 31 operably linked to a regulatory sequence.

Claim 38 (previously presented): A vector comprising a polynucleotide of claim 31.

Claim 39 (previously presented): A method for transforming a cell comprising transforming a cell with a polynucleotide of claim 31.

Claim 40 (previously presented): A cell comprising a chimeric gene of claim 37.

Claim 41 (previously presented): A method for producing a plant comprising transforming a plant cell with a chimeric gene of claim 37 and regenerating a plant from the transformed plant cell.

Claim 42 (previously presented): A plant comprising a chimeric gene of claim 37.

Claim 43 (previously presented): A seed comprising a chimeric gene of claim 37.

Claims 44-66 (cancelled)